

Summary of Pesticide Detections in Surface Waters
Statewide Pesticide Sampling Pilot Project
Hawaii Department of Agriculture and Hawaii Department of Health

Highest Value Above the Strictest Standard	Locations Detected	Type of pesticide	Parent or Breakdown Product	Locations Exceeding Strictest Standard	Highest Value ug/l	Strictest Standard Value ug/l	Ratio (Highest Value/Strictest Standard)	Strictest Standard Source
Dieldrin	3	Insecticide	Parent	3	0.069	0.000025	2760	Fish Consumption Hawaii WQC ⁴
Highest Value Above the Strictest Benchmark	Locations Detected	Type of pesticide	Parent or Breakdown Product	Locations Exceeding Strictest Benchmark	Highest Value ug/l	Strictest Benchmark Value ug/l	Ratio (Highest Value/Strictest Benchmark)	Strictest Benchmark Source
Fipronil	5	Insecticide	Parent	3	0.026	0.011	2.364	CI OPP ²
Atrazine*	14	Herbicide	Parent	1	2.050	1	2.05	ANVP OPP ²
Cyfluthrin**	1	Insecticide	Parent	1	0.014	0.007	1.892	CI OPP ²
Fipronil Sulfone	4	Insecticide	Degradate	1	0.043	0.037	1.162	CI OPP ²
Metolachlor*	5	Herbicide	Parent	1	1.070	1	1.07	CI OPP ²
Highest Value Between 1 and 1/10 of the Strictest Benchmark	Locations Detected	Type of pesticide	Parent or Breakdown Produce	Locations Exceeding Strictest Benchmark	Highest Value ug/l	Strictest Benchmark Value ug/l	Ratio (Highest Value/Strictest Benchmark)	Strictest Benchmark Source
Chlorpyrifos*	2	Insecticide	Parent	0	0.005	0.04	0.125	CI OPP ²
Highest Value Between 1/10 and 1/100 of the Strictest Benchmark	Locations Detected	Type of pesticide	Parent or Breakdown Produce	Locations Exceeding Strictest Benchmark	Highest Value ug/l	Strictest Benchmark value ug/l	Ratio (Highest Value/Strictest Benchmark)	Strictest Benchmark Source
Fipronil Sulfide	4	Insecticide	Degradate	0	0.010	0.11	0.091	CI OPP ²
Sulfometuron-methyl	2	Herbicide	Parent	0	0.025	0.48	0.052	HBSL USGS App. 3 ⁵
MCPA	3	Herbicide	Parent	0	0.120	2.6	0.046	Aquatic Life Guideline CAN-Interim ¹
Hydroxyatrazine (OIET)	18	Herbicide	Degradate	0	3.150	70	0.045	HBSL USGS App. 3 ⁵
Diuron	3	Herbicide	Parent	0	0.070	2	0.035	HBSL USGS App. 3 ⁵
Carbaryl	3	Insecticide	Parent	0	0.013	0.5	0.026	CI OPP ²
Desulfinylfipronil	8	Insecticide	Degradate	0	0.009	0.59	0.015	CF OPP ²
Fluometuron	1	Herbicide	Parent	0	0.060	4	0.015	HBSL USGS App. 3 ⁵
Benomyl	4	Fungicide	Parent	0	0.035	2.8	0.013	AF ECOTOX USGS App. 3 ⁵
Bromacil*	1	Herbicide	Parent	0	0.070	6.8	0.010	ANVP OPP ²

1. CCME, Canadian Environmental Quality Guidelines, <http://st-ts.ccme.ca/>

*Hawaii Restricted Use Pesticides **Available in both Restricted Use and Non Restricted Use Formulations

2. EPA Office of Pesticide Programs Aquatic Life Benchmarks, http://www.epa.gov/oppefed1/ecorisk_ ders/aquatic_life_benchmark.htm#benchmarks

3. EPA Basic Information about Regulated Drinking Water Contaminants and Indicators, <http://water.epa.gov/drink/contaminants/basicinformation/index.cfm>

4. Hawaii Water Quality Criteria, <http://gen.doh.hawaii.gov/sites/har/AdmRules1/11-54.pdf>

5. USGS National Water-Quality Assessment Program, <http://pubs.usgs.gov/sir/2012/5045/pdf/sir20125045.pdf>

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Highest Value Between 1/100 and 1/1000 of the Strictest Benchmark	Locations Detected	Type of pesticide	Parent or Breakdown Produce	Locations Exceeding Strictest Benchmark	Highest Value ug/l	Strictest Benchmark Value ug/l	Ratio (Highest Value/Strictest Benchmark)	Strictest Benchmark Source
Prometryn	1	Herbicide	Parent	0	0.008	1	0.008	ANVP OPP ²
Simazine*	7	Herbicide	Parent	0	0.031	4	0.008	MCL EPA ³
2,4-D	1	Herbicide	Parent	0	0.090	13.10	0.007	ANVP OPP ²
Hexazinone*	4	Herbicide	Parent	0	0.034	7	0.005	ANVP OPP ²
Iprodione (Aniline)	8	Fungicide	Parent	0	0.004	0.80	0.005	HBSL USGS App. 3 ⁵
Oxyfluorfen	1	Herbicide	Parent	0	0.001	0.29	0.003	ANVP OPP ²
Benfluralin	1	Herbicide	Parent	0	0.002	1.9	0.0011	CF OPP ²
Highest Value Less Than 1/1000 of Strictest Benchmark	Locations Detected	Type of pesticide	Parent or Breakdown Produce	Locations Exceeding Strictest Benchmark	Highest Value ug/l	Strictest Benchmark Value ug/l	Ratio (Highest Value/Strictest Benchmark)	Strictest Benchmark Source
Trifluralin	4	Herbicide	Parent	0	0.001	1.14	0.0009	CF OPP ²
trans-Propiconazole	3	Fungicide	Parent	0	0.014	21	0.0007	ANVP OPP ²
Triclopyr	2	Herbicide	Parent	0	0.060	100	0.0006	ANVP OPP ²
Tebuthiuron	1	Herbicide	Parent	0	0.027	50	0.0005	ANVP OPP ²
cis-Propiconazole	3	Fungicide	Parent	0	0.011	21	0.0005	ANVP OPP ²
Methiocarb*	2	Insecticide	Parent	0	0.018	40	0.0005	HBSL USGS App. 3 ⁵
Glyphosate	3	Herbicide	Parent	0	0.110	700	0.000157	MCL EPA ³
Bentazon	3	Herbicide	Parent	0	0.020	200	0.0001	HBSL USGS App. 3 ⁵
Metalaxyl	1	Fungicide	Parent	0	0.007	100	0.00007	CI OPP ²
Prometon	1	Herbicide	Parent	0	0.003	98	0.000031	ANVP OPP ²
Myclobutanil	1	Fungicide	Parent	0	0.004	200	0.000020	HBSL USGS App. 3 ⁵
Imazaquin	2	Herbicide	Parent	0	0.030	2000	0.000015	HBSL USGS App. 3 ⁵
DCPA	1	Herbicide	Parent	0	0.000	70	0.000006	HBSL USGS App. 3 ⁵
4-Chloro-2-methylphenol	1	Herbicide	Degradate	0	0.006	1150	0.000005	AF ECOTOX USGS App. 3 ⁵
AMPA	3	Herbicide	Degradate	0	0.140	249500	0.0000006	AF OPP ²
Desulfinylfipronil amide	4	Insecticide	Degradate	0	0.022	Not Found		
Deethylatrazine	16	Herbicide	Degradate	0	0.104	Not Found		
OEAT	5	Herbicide	Degradate	0	0.060	Not Found		